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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,918	03/30/2004	Masahiro Ono	ED-US030239	3163
22919	7590	05/15/2006	EXAMINER	
GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			BONCK, RODNEY H	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/811,918

Applicant(s)

ONO ET AL.

Examiner

Rodney H. Bonck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

The following action is in response to the amendment received March 10, 2006 and the request for continued examination filed April 17, 2006.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wack et al.(US 2002/0175037 A1). The Wack et al. device discloses a hydrodynamic torque transmitting device comprising an input side front cover 1, an impeller 11, a turbine 17 having a turbine hub 27, and a piston 40. The piston has a disk-shaped main body and

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a frictional coupling portion (adjacent friction lining 46), and an inner support portion.

The turbine hub 27 and the front cover 1 include opposing portions that are mutually opposed to each other across a space in an axial direction (see the figure in Wack et al.). A gap in the axial direction is maintained between the opposing portions such that a load would not be applied to the front cover when the piston moves to a position closest to the front cover. The space as shown is clearly longer than the axial distance between the frictional coupling portion and the front cover. The support portion of the piston is an annular portion, which can be said to have a constant radial width, at least to the same extent as does the instant invention. The radial width is clearly several times the plate thickness of the piston. The piston further includes a cylindrical portion extending toward the front cover. Claim 8 requires that the axial position of the axial end of the cylindrical portion be in axial alignment with an axial engine side surface of the turbine hub. In Wack et al., the axial end of the cylindrical portion is shown terminating a very small amount short of the axial end of the turbine hub. A review of the instant disclosure shows, however, that the intent is to prevent load from the turbine from being applied to the front cover. The specification does not appear to disclose any particular purpose of or any particular problem solved by exact alignment of the axial end of the cylindrical portion and the end of the turbine hub, and it appears that having the tiny spacing shown in Wack et al. would provide a device that performs equally well. Therefore, aligning the axial end of the cylindrical portion of the piston with the axial end of the turbine hub is not seen as a patentable difference from the slight spacing shown by Wack et al.

Claims 1-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wack et al.(US 2002/0175037 A1) as applied to claim 8 above, and further in view of Hinkel('195). Claim 1 requires that the flat surface that axially contacts the turbine and the axially extending cylindrical portion extend from the innermost peripheral edge of the piston. In the Wack et al. device, the flat portion is spaced slightly above the innermost peripheral edge of the piston. Hinkel discloses a similar arrangement wherein piston 28 has a flat portion axially contacting the turbine and an axially extending cylindrical portion. In Hinkel, both the flat portion and the cylindrical portion extend from the innermost peripheral edge of the piston. It would have been obvious to provide the flat portion and cylindrical portion in Wack et al. extending from the innermost peripheral edge, since this arrangement is known in this art and so shaping the piston in Wack et al. would be easier than providing the slight bend at the inner peripheral edge shown in Wack et al. Claim 9 requires that the portion of the hub that contacts the cylindrical portion of the piston includes a seal member. The Wack et al. device does not show a seal. Hinkel shows a seal at the portion of turbine hub 34 that contacts the cylindrical portion of the piston. It would have been obvious to provide a seal in the Wack et al. device, the motivation being to prevent pressure from leaking past the piston periphery.

***Response to Amendment***

The amendment to claim 1, filed March 10, 2006, overcomes the rejection based on 35 USC 112, second paragraph. Accordingly, the rejection is withdrawn.

***Response to Arguments***

Applicant's arguments filed March 10, 2006 have been fully considered but they are not persuasive. The axial alignment called for in claim 8 is not seen to patentably distinguish over Wack et al. for the reasons set forth above in the rejection of claim 8. Regarding claim 1, Hinkel is now applied to show the claimed configuration where the flat portion and cylindrical portion extend from the innermost peripheral edge.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dehrmann et al. ('363) is cited for its showing of the axial end of the cylindrical portion of the piston being in alignment with the axial end of the turbine hub (see Figs. 5, 6, 6a, 8, and 8a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (571) 272-7089. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck  
Primary Examiner  
Art Unit 3681

rhb  
May 11, 2006